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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,902

04/14/2006

Ekkehard Roth

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EXAMINER

HUDA, SAEED M

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

04/08/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
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Office Action Summary	Application No. 10/575,902	Applicant(s) ROTH, EKKEHARD	
	Examiner SAEED M. HUDA	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The response filed on 01/04/2010 has been fully considered and entered into the record. Claim 10 is cancelled and the rejections applying to the cancelled claims withdrawn. Claims 14-20 are withdrawn. Claims 1-9 and 11-13 are ready for examination.

Foreign Priority

2. The claim of foreign priority and receipt of all the certified copies in this national stage application has been acknowledged

Election/Restrictions

3. Applicant's election with traverse of claim 14-20 and in the reply filed on 01/04/2010 is acknowledged. The traversal is on the ground(s) that the basis for the restriction requirement is not clearly presented. This is not found persuasive because a clear showing of the reasoning behind the restriction has been presented.

The product as claimed can be made by another and materially different process such as embedding the fiber and filler into the resin matrix.

Additionally, restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;

- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

The requirement is still deemed proper and is therefore made FINAL.

Response to Arguments

4. Applicant's arguments with respect to claims 1-9 and 11-13 have been considered but are moot in view of the new ground(s) of rejection, to the extent that the arguments are applicable to the new grounds of rejection; they are addressed below.

Applicant states that the independent claim has been amended to state that the filler comprise the reinforcement fibers that have been at least one of ground and cut so that the filler is of the same actual material as the reinforcement fibers. Applicant states that none of the prior art documents present teach this alleged novel invention.

For examination purposes, the Examiner has interpreted the claim by its broadest reasonable interpretation. Claim 1 is interpreted to cover a method for making a composite material comprising a resin and reinforcement fibers and in addition to this a filler is present where the filler comprises cut reinforcement fibers. Since the claim does not further limit or distinguish the size of the reinforcement fiber with respect to the fibers used as the filler, the produced composite material comprising a resin matrix and fibers. Applicant should note that in most fiber composite production processes, the fiber must be cut prior to adding it to the resin. The rejections provided for may provide

Art Unit: 1791

art that is more narrow than the claimed subject matter, but this does not negate the fact that the claims are, in fact, written more broadly.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4-9, and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Spaay (US 4883624).

a. Regarding claims 1 and 4, Spaay teaches a process for manufacturing blanks comprising the production of a batch of fiber-reinforced synthetic resin compound (fiber composite material), the production of a piece of fiber mat, depositing the batch of compound onto the piece of fiber mat, and conveying them together into a press for molding them together (abstract). Spaay teaches that glass, polyester, polyamide, or aramid fibers are taken of the delivery spool in an endless manner (reinforcement fibers) and are mixed with cut fibers. They are then fed to the molding apparatus. The fibers are embedded into the molding compound of the resin composition and fillers (column 1, lines 20-30). Here the filler can comprise part of the cut fibers.

b. Regarding claim 5, Spaay teaches that the finished product can be formed into sheet (film) product (column 1, lines 10-35).

Art Unit: 1791

- c. Regarding claim 6, Spaay teaches that the fiber reinforced synthetic resin (resin filler film) compound may be laced onto a piece of a fiber mat (semi-finished textile product).
- d. Regarding claim 7, Spaay teaches placing the resin filler film and the semi-finished textile product into the molding apparatus at the same time (claim 1); however, it would have been obvious to one having ordinary skill in the art at the time of the invention to place the resin filler film either before or after the semi-finished textile depending on which side of the semi-finished textile product is to be contacted with the resin filler film.
- e. Regarding claim 8, Spaay teaches that the fiber composite material is placed into a molding apparatus (claim 1).
- f. Regarding claim 9, claim 8 states wherein the fiber composite material is applied into a component mold *or* onto a semi-finished textile product in a spray mold. The Examiner has chosen to examine the first part of the "or" statement and thus will not examine the content of this claim in that it depends on the second unexamined claim portion.
- g. Regarding claim 11, Spaay teaches that any of the mentioned forms of fabrics would have been obvious to one having ordinary skill in the art at the time of the invention in that they are all common textile product forms.
- h. Regarding claim 12, Spaay teaches that the resin filler film comprises a preform (i.e. fiber reinforced thermosetting synthetic resin compound) (claim 1).

Art Unit: 1791

7. Claims 1 and 3 rejected under 35 U.S.C. 102(b) as being anticipated by Cogswell et al. (US 4713283)

Cogswell et al. teach a reinforcement composite structure comprising parallel aligned continuous filaments said fibers being bonded together the thermoplastic matrix polymer where the structure comprises filamentary reinforcing material and particulate filler (abstract). Cogswell et al. go on to teach that the composite structure comprises aligned continuous filaments (claimed reinforcement fibers) that extend the length of the structure (thus these fibers are of finite length and must have been cut). The fibers are bonded together with a thermoformable matrix polymer (resin) (column 1, lines 35-50). A certain percentage of the fibers used can be the reinforcement fibers of Applicant and another percentage of the fibers can be used as a filler material that comprises cut reinforcement fibers, wherein the fibers have a length in a range of 3 mm – 10 mm (column 6). Cogswell et al. teach the use of particulate fillers (column 1, lines 40-55) made of other material, but this does not preclude the fact that a certain percentage of the fibers used can be the reinforcement fibers and another percentage of the fibers can be used as a filler material that comprises cut reinforcement fibers.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1791

9. Claims 2-3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spaay (US 4883624) or Cogswell et al. (US 4713283) in view of Takabatake (US 4975261).

Spaay or Cogswell is silent with regards to the cut fiber length. Takabatake teaches a process where a carbon-carbon composite is made. The process includes impregnating an aggregate bundle of carbon fibers with a liquid dispersion of carbonaceous material of resin (abstract) (similar to that of Spaay and the invention of Applicant). Takabatake teaches that in the process a short fibers which are either *cut or ground* into fibers length of 2 mm or less are used (column 3, lines 25-30). It would have been obvious to one having ordinary skill in the art at the time of the invention to use the fibers length indicated above in the invention of Spaay or Cogswell in that this is a known fiber length used to form composites consist of reinforcing fibers mixed with resin as exemplified by the teaching of Takabatake.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAEED M. HUDA whose telephone number is (571)270-5514. The examiner can normally be reached on 8:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KHANH NGUYEN/
Primary Examiner, Art Unit 1791

/SAEED M. HUDA/
Examiner, Art Unit 1791